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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,395	01/30/2006	Takaki Shimura	Q92594	3611
23373 7590 08/19/2009 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER GEBREMICHAEL, BRUK A	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/566,395

Applicant(s)

SHIMURA ET AL.

Examiner

BRUK A. GEBREMICHAEL

Art Unit

3715

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The following office action is a **Final Office Action** in response to communications received on 05/21/2009. Currently claims 1-31 are pending in this application. Applicant has amended the title of the current application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 1-3, 6 and 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wen 6,341,959 in view of Shimura 2002/0059031.

Regarding claim 1, Wen discloses the following claimed limitations; a dementia inspection apparatus comprising an answer obtaining section and a dementia degree inspecting section, wherein the answer obtaining section obtains answers from a subject to each of a first examination chart and a second examination chart (see col.3, lines 39-45 and FIG 3 e.g. see labels Filling the blank and selections), the first examination chart has inspection sentences in which a character group constituting a story, the second examination chart has a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of which is to be selected (col.4, lines 57-63), and the dementia degree inspection section determines a dementia degree representing a degree of

dementia of the subject based on the answers obtained by the answer obtaining section (col.6, lines 13-25).

Wen does not explicitly teach, the answer obtaining section obtains answers from a subject made within a predetermined answer time limit; the inspection sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color, requires a determination as to whether a color of characters constituting the color word is the same color as color represented by the color word, and requires an answer in a style capable of objectively determining whether the determination is correct or error.

However, Shimura teaches, answer obtaining section obtains answers from a subject made within a predetermined answer time limit (Para.0178); the inspection sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color (Para.0146), requires a determination as to whether a color of characters constituting the color word is the same color as color represented by the color word (Para.0147), and requires an answer in a style capable of objectively determining whether the determination is correct or error (Para.0148).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura by incorporating characters that have different colors in the story, wherein the meanings of some of the characters coincide with the colors they represent (see

Shimura Para.01047) in order to evaluate the user's ability to recognize the relationships between a given word or phrase in the story to the color it is representing, thereby recommending appropriate diagnosis to rectify the user's problems.

Regarding claim 2, Wen in view of Shimura teaches the claimed limitations as discussed above.

Wen further discloses, a first examination chart forming section, wherein the first examination chart forming section has plural kinds of inspection sentences and selects one kind of inspection sentences from the plural kinds of inspection sentences as inspection sentences of the first examination chart, thereby forming the first examination chart (col.4, lines 37-45 and col.5, e.g. see problem A).

Shimura further teaches, the first examination chart forming section has plural kinds of inspection sentences tinted with colors in different coloring manners (Para.0146).

Therefore, as already indicated above, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura by incorporating characters that have different colors in the story, wherein the meanings of some of the characters coincide with the colors they represent (see Shimura Para.01047) in order to evaluate the user's ability to recognize the relationships between a given word or phrase in the story to the color it is representing, thereby recommending appropriate diagnosis to rectify the user's problems.

Regarding claim 3, Wen in view of Shimura teaches the claimed limitations as discussed above.

Wen further discloses, the second examination chart forming section has plural kinds of question units each comprising a combination of a question concerning a story represented by the inspection sentences and plural answers which are prepared for the question and which are to be selected (see col.4, lines 57-63 and col.6, see problem B), a predetermined number of question units are selected from the plural kinds of question units, thereby forming the second examination chart (co1.5, lines 1-7).

Regarding claim 6, Wen in view of Shimura teaches the claimed limitations as discussed above.

Shimura further teaches, the inspection sentences, character strings divided by specific kind of characters are tinted with colors different from each other (Para.0146).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura by associating the color of the words with their meaning in order assess the user's ability to differentiate between the color of the word and the meaning it represents thereby determining the mental condition of the user.

Regarding claim 7, Wen in view of Shimura teaches the claimed limitations as discussed above.

Wen further discloses, a chart display section which displays the first examination chart and the second examination chart (co1.3, lines 39-45), a start

instructing section which instructs the subject to start inputting answers to the first examination chart and the second examination chart (FIG 5, label 561).

Shimura further teaches, an answer time control section which prohibits the subject from inputting answer when time elapsed after the start instructing section instructed to start inputting answer to the first/second examination chart reaches a predetermined answer time limit in accordance with the first/second examination chart (Para.0178).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura by setting a predetermined time limit (e.g. two minutes) for the user to answer the given question in order to enforce the user to properly pay attention to the presented question and identify the possible answer within the given amount of time, thereby teaching the user how to be more efficient in carrying out tasks.

Regarding claim 8, Wen in view of Shimura teaches the claimed limitations as discussed above.

Wen further discloses, a result display section which displays a dementia degree inspection result obtained by the dementia degree inspecting section (see col.3, lines 42-48),

Regarding claim 9, Wen in view of Shimura teaches the claimed limitations as discussed above.

Shimura further teaches, an inspection receiving permission judging section which permits or prohibits a request for inspection of an inspection wisher in accordance

with whether or not a predetermined period of time is elapsed after the inspection wisher received inspection last time (Para.0173).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura by incorporating a test-allowability judging section (e.g. see Shimura FIG 9, label 137) in order to set a predetermined amount of time (e.g. two months) that must pass before the user is allowed to be tested again, in order to make sure that the user does not have any recollections of the content of the test that he had previously, thereby avoiding erroneous assessment results.

Regarding claim 10, Wen in view of Shimura teaches the claimed limitations as discussed above.

Shimura further teaches, a dementia degree storing section which stores correspondence between answers and dementia degree with respect to both the first examination chart and second examination chart (FIG 9, label 135), wherein the dementia degree inspecting section refers to the dementia degree storing section, and determines a dementia degree of the subject from answers to both the first examination chart and second examination chart of the current subject obtained by the answer obtaining section (Para 0180,lines 6-14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura by including storing and testing sections in order to test the user's current mental status and then estimate the future conditions of the user based on the test

result, so that the user would be provided with appropriate recommendations to improve his/her condition.

Regarding claim 11, Wen in view of Shimura teaches the claimed limitations as discussed above.

Wen further discloses, extracting a number of correct meaning grasps with respect to plural questions concerning a story described by the inspection sentences from answers to the second examination chart obtained by the answer obtaining section (col.5, lines 1-8 and lines 58-67), and compares these extracted numbers with predetermined reference values with respect to these numbers, thereby determining the dementia degree, the dementia degree storing section stores the predetermined reference values (col.6, lines 12-25).

Shimura further teaches, from the answers to the first examination chart obtained by the answer obtaining section, the dementia degree inspecting section extracts a number of correct answers as to whether color of characters constituting the color word is the same color as that represented by the color word (Para.0147 and Para.0149).

Therefore, as already indicated above, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura by incorporating characters that have different colors in the story, wherein the meanings of some of the characters coincide with the colors they represent (Shimura Para.0147) in order to evaluate the user's ability to recognize the relationships between a given word or phrase in the story to the color it is

representing, thereby recommending appropriate diagnosis to rectify the user's problems.

With regard to the claimed limitation "a number of error answers erroneously determined, a number of oversights of color words, and a number of erroneous recognition of characters other than the color words", Shimura in general teaches evaluating the user based on correct response, incorrect response and oversight (e.g. see FIG 6 and Para.0155), and therefore when the general condition of the claimed subject matter is as taught by the prior art, it requires only a routine skill in the art to include such assessment parameters, and therefore this does not distinguish the current invention from the prior art.

Regarding claim 12, Wen in view of Shimura teaches the claimed limitations as discussed above.

Wen further teaches, plural alternatives which are prepared as answers to the questions and one of which is to be selected, the second examination chart includes alternatives for informing that the subject does not know correct answer (see col.4, lines 57-63), the dementia degree inspecting section further extracts a number of unclear answers showing how many alternatives for informing that the subject does not know correct answer the subject selected from answers to the second examination chart obtained by the answer obtaining section (col.6, lines 12-25).

Here also, with regard to the claimed limitation, "determines the dementia degree based on the number of unclear answers, the number of correct answers, the number of error answers, the number of oversights, the number of erroneous recognition, and the

number of meaning grasps", Shimura in general teaches, determining the dementia degree based on correct response, incorrect response and oversight (e.g. see FIG 6 and Para.0155), and therefore when the general condition of the claimed subject matter is as taught by the prior art, it requires only a routine skill in the art to include such additional assessment parameters, and therefore this does not distinguish the current invention from the prior art.

- Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wen 6,341,959 in view of Shimura 2002/0059031, and further in view of Braunberger 2003/0077559.

Regarding claim 4, Wen in view of Shimura teaches the claimed limitations as discussed above.

Wen further discloses, the plural kinds of question units are associated with positions in the inspection sentences the dementia inspection apparatus further comprises a sentence range detecting section which detects a range of the inspection sentences with respect to the first examination chart (col.4, lines 20-32), the second examination chart forming section selects a question unit associated with a position in the range detected by the sentence range detecting section in the inspection sentence, thereby forming the second examination chart (col.4, lines 57-64).

Wen in view of Shimura does not explicitly teach, a sentence range detecting section which detects a range of the inspection sentences which a subject was able to read within a predetermined answer time limit.

However, Braunberger discloses a method and apparatus for periodically questioning that teaches, a sentence range detecting section which detects a range of the inspection sentences which a subject was able to read within a predetermined answer time limit (Para.0034, lines 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura and further in view of Braunberger by configuring a Testing GUI in order to set a time limit that the user must read a given paragraph so that the paragraph would be removed from the screen as the set time expires and follow-up questions related to the paragraph would be presented to the user in order to evaluate the amount of information that the user is able to comprehend within a given amount of time.

- Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wen 6,341,959 in view of Shimura 2002/0059031, and further in view of Polanyi 2003/0093275.

Regarding claim 5, Wen in view of Shimura teaches the claimed limitations as discussed above.

Shimura further teaches, the color words in the character group of the inspection sentences are tinted with plural colors such that individual color word has characters of the same color (Para.0146).

Wen in view of Shimura does not explicitly teach, characters in the character group except the color words are tinted with a single color.

However Polanyi discloses systems and methods for dynamic reading instruction that teaches, characters in the character group except the color words are tinted with a single color (Para.0036).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura and further in view of Polanyi by displaying explanatory sentences on the screen and coinciding the font color of the given word with its meaning in order to allow the user to clearly memorize such words by recalling their color, so that the user would be able to remember the meanings of the words even after some extended period of time.

- Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wen 6,341,959 in view of Shimura 2002/0059031, and further in view of McElwrath 2004/0009462.

Regarding claim 13, Wen in view of Shimura teaches the claimed limitations as discussed above.

Wen in view of Shimura teaches the claimed limitations except for the features being for a pre-test first examination chart and a pre-test second examination chart.

Wen discloses the following features, the first examination chart includes sentences in which a character group constituting a story (col.4, lines 57-63), the second examination chart has a combination of plural questions concerning contents of the sentences and plural answers which are prepared for each question and one of which is to be selected (col.4, lines 57-63), wherein the answer obtaining section

obtains answers of the subject to both the first examination and the second examination chart (col.3, lines 39-45 and FIG 3, e.g. see Filling the blank and selections), and wherein the dementia degree inspecting section determines the dementia degree which represents a degree of dementia of the subject based on the answers to the first examination chart and the second examination chart (col.6, lines 13-25).

Shimura further teaches, the story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color, requires a determination as to whether a color of the characters constituting the color word is the same color as color represented by the color word (Para.0147), and requires an answer in a style capable of objectively determining whether the determination is correct or error; the answer obtaining section obtains answers of the subject made within predetermined answer time limits to both the first examination and the second examination chart (Para.0178).

Thus, as indicated above, Wen in view of Shimura teaches the above features except the features being for a pre-test first examination chart and a pre-test second examination chart.

However, McElwrath discloses a learning system that teaches pre-test module for generating different types pre-tests (Para.0467).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura and further in view of McElwrath by incorporating a pre-test module in order to generate pre-tests that have similar features as the actual tests so that the user would

know the type of questions that he/she is expected to complete for the actual test, thereby mentally preparing the user.

- Claims 14-16, 19-22, 24-26, 28-29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura 2002/0059031 in view of Wen 6,341,959.

Regarding claim 14, Shimura discloses the following claimed limitations; a dementia inspection server in a dementia inspection system comprising the dementia inspection server and a dementia inspection client connected to each other through a line of communication (Para.0001), the dementia inspection server comprising a chart storing section which stores a first examination chart and a second examination chart (Para.0053), the first examination chart having inspection sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color (Para.0146 and Para.0152), requires a determination as to whether a color of characters constituting the color word is the same color as color represented by the color word (Para.0147), and requires an answer in a style capable of objectively determining whether the determination is correct or error (Para.0148), a chart sending section which sends the first examination chart and the second examination chart to the dementia inspection client (Para.0054), an answer receiving section which receives answers to the first examination chart and the second examination chart from the dementia inspection client (Para.0055), and a dementia degree inspecting section which examines a dementia degree representing a degree of dementia of a subject based on the answers obtained by the answer receiving section (Para.0056).

Shimura does not explicitly disclose, the second examination chart having a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of which is to be selected.

However, Wen discloses a method and system for learning language that teaches, examination chart having a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of which is to be selected (col.4, lines 20-26 and lines 57-63).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen by including questions that are related to the story in a multiple choice format in order to evaluate the user's ability to recall a lesson learnt in the past when he/she analyzes the given alternatives as a hint to trigger his/her memory.

Regarding claim 15, Shimura in view of Wen teaches the claimed limitations as discussed above.

Shimura further discloses, a first examination chart forming section, wherein the first examination chart forming section has plural kinds of inspection sentences tinted with colors in different coloring manners and selects one kind of inspection sentences from the plural kinds of inspection sentences as inspection sentences of the first examination chart, thereby forming the first examination chart (Para.0146 and FIG 6).

Regarding claim 16, Shimura in view of Wen teaches the claimed limitations as discussed above.

Wen further teaches, a second examination chart forming section, wherein the second examination chart forming section has plural kinds of question units each comprising a combination of a question concerning a story represented by the inspection sentences and plural answers which are prepared for the question and which are to be selected (col.4, lines 57-63 and col.5, see problem B), a predetermined number of question units are selected from the plural kinds of question units, thereby forming the second examination chart (col.5, lines 1-7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen by generating questions from the story in a multiple choice format in order to evaluate the user's ability to recall a given event when he/she is given some clue to trigger his/her memory.

Shimura in view of Wen teaches the claimed limitations as discussed above. Shimura further discloses;

Regarding claim 19, in the inspection sentences, character strings divided by specific kind of characters are tinted with colors different from each other (Para.0146),

Regarding claim 20, a dementia degree storing section which stores correspondence between answers and dementia degree with respect to both the first examination chart and second examination chart (Para.0053), wherein the dementia degree inspecting section refers to the dementia degree storing section, and determines a dementia degree of the subject from answers to both the first examination chart and

second examination chart of the current subject obtained by the answer obtaining section (Para.0055 and Para.0056).

Regarding claim 21, Shimura in view of Wen teaches the claimed limitations as discussed above.

Shimura further discloses, the answers to the first examination chart obtained by the answer obtaining section, the dementia degree inspecting section extracts a number of correct answers as to whether color of characters constituting the color word is the same color as that represented by the color word (Para.0147 and Para.0149).

Wen further discloses, extracting a number of correct meaning grasps with respect to plural questions concerning a story described by the inspection sentences from answers to the second examination chart obtained by the answer obtaining section (col.5, lines 54-67), and compares these extracted numbers with predetermined reference values with respect to these numbers, thereby determining the dementia degree, and the dementia degree storing section stores the predetermined reference values (col.6, lines 12-25).

With regard to the limitation, "a number of error answers erroneously determined, a number of oversights of color words, and a number of erroneous recognition of characters other than the color words", Shimura in general discloses evaluating the user based on correct response, incorrect response and oversight (e.g. see FIG 6 and Para.0155), and therefore when the general condition of the claimed subject matter is as taught by the prior art, it requires only a routine skill in the art to include such

assessment parameters, and therefore this does not distinguish the current invention from the prior art.

Regarding claim 22, Shimura in view of Wen teaches the claimed limitations as discussed above.

Wen further teaches, in plural alternatives which are prepared as answers to the questions and one of which is to be selected, the second examination chart includes alternatives for informing that the subject does not know correct answer (col.4, lines 57-63), the dementia degree inspecting section further extracts a number of unclear answers showing how many alternatives for informing that the subject does not know correct answer the subject selected from answers to the second examination chart obtained by the answer obtaining section (col.6, lines 12-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen by presenting explanation to the user on the display regarding the questions that he/she answered incorrectly in order to help the user understand the correct answer and also retain the information learnt.

Regarding the limitation, "determines the dementia degree based on the number of unclear answers, the number of correct answers, the number of error answers, the number of oversights, the number of erroneous recognition, and the number of meaning grasps", here also Shimura in general discloses, determining the dementia degree based on correct response, incorrect response and oversight (e.g. see FIG 6 and Para.0155), and therefore when the general condition of the claimed subject matter is

as taught by the prior art, it requires only a routine skill in the art to include such additional assessment parameters, and therefore this does not distinguish the current invention from the prior art.

Shimura in view of Wen teaches the claimed limitations as discussed above.
Shimura further discloses,

Regarding claim 24, a result sending section which sends a dementia degree inspection result obtained by the dementia degree inspecting section to the dementia inspection client (FIG 21, label 717),

Regarding claim 25, an inspection receiving permission judging section which permits or prohibits a request for inspection of an inspection wisher in accordance with whether or not a predetermined period of time is elapsed after the inspection wisher received inspection last time (FIG 21, label 718),

Regarding claim 26, Shimura discloses the following claimed limitations; a dementia inspection client in a dementia inspection system comprising a dementia inspection server and the dementia inspection client connected to each other through a line of communication (Para.0001), wherein the dementia inspection client comprises a chart receiving section which receives, from the dementia inspection server, a first examination chart and a second examination chart (Para.0058), the first examination chart having inspection sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color (Para.0146 and Para.0152), requires a determination as to whether a color of characters constituting the color word

is the same color as color represented by the color word (Para.0147), and requires an answer in a style capable of objectively determining whether the determination is correct or error (Para.0148), a chart display section which displays the first examination chart and the second examination chart received by the chart receiving section (Para.0059), an answer obtaining section which obtains answers made within predetermined answer time limits for the first examination chart and the second examination chart displayed on the chart display section in accordance with operation (Para.0060 and Para.0178), and an answer sending section which sends the answers obtained by the answer obtaining section to the dementia inspection server (Para.0061).

Shimura does not explicitly disclose, the second examination chart having a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of which is to be selected.

However, Wen discloses a method and system for learning language that teaches, examination chart having a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of which is to be selected (see col.4, lines 20-26 and lines 57-63).

Therefore, as already indicated it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen by including questions that are related to the story in a multiple choice format in order to evaluate the user's ability to recall a lesson learnt in the past when he/she analyzes the given alternatives as a hint to trigger his/her memory.

Shimura in view of Wen teaches the claimed limitations as discussed above.
Shimura further discloses,

Regarding claim 28, a result receiving section that receives a dementia degree inspection result, which is obtained by the dementia inspection server based on the answers from the dementia inspection client and sent from the dementia inspection server (FIG 21, labels 717 and 725), and a result display section which displays the dementia degree inspection result received by the result receiving section (see FIG 21, label 726),

Regarding claim 29, a start instructing section which instructs the subject to start inputting answers to the first/second examination chart and, and an answer time control section which prohibits the subject from inputting answer when time elapsed after the start instructing section instructed to start inputting answer to the first/second examination chart reaches a predetermined answer time limit in accordance with the first/second examination chart (Para.0178).

Regarding claim 31, Shimura discloses the following claimed limitations; a dementia inspection system comprising a dementia inspection server and a dementia inspection client connected to each other through a line of communication (Para.0001), wherein the dementia inspection server comprises a first examination chart forming section (Para.0053), the first examination chart forming section has plural kinds of inspection sentences tinted with colors in different coloring manners and selects one kind of inspection sentences from the plural kinds of inspection sentences as inspection sentences of the first examination chart, thereby forming the first examination chart

(Para.0146 and Para.0154), the dementia inspection server further comprises a second examination chart forming section (Para.0053), the second examination chart forming section has plural kinds of question units each comprising a combination of a question concerning a story represented by the inspection sentences (Para.0152 and Para.0154), a chart sending section which sends the first examination chart and the second examination chart to the dementia inspection client (FIG 21, label 712), an answer receiving section which receives answers made within predetermined answer time limits to both the first examination chart and second examination chart from the dementia inspection client (FIG 21, label 713, and Para.0178), and a dementia degree inspecting section which determines a dementia degree representing a degree of dementia of the subject based on the answers obtained by the answer receiving section (Para.0056), the dementia inspection client comprises a chart receiving section which receives the first examination chart and the second examination chart sent from the dementia inspection server (FIG 21, label 721), a chart display section which displays the first examination chart and the second examination chart received by the chart receiving section (FIG 21, label 722), an answer obtaining section which obtains answers made within predetermined answer time limits for the first examination chart and the second examination chart displayed on the chart display section in accordance with operation (FIG 21, label 723 and Para.0178), and an answer sending section which sends the answers obtained by the answer obtaining section to the dementia inspection server (FIG 21, label 724).

Shimura does not explicitly disclose, plural answers which are prepared for the question and which are to be selected, a predetermined number of question units are selected from the plural kinds of question units, thereby forming the second examination chart.

However, Wen discloses method and system for learning a language that teaches, plural answers which are prepared for the question and which are to be selected (col.4, lines 57-63), a predetermined number of question units are selected from the plural kinds of question units, thereby forming the second examination chart (col.5, lines 1-7).

Therefore here also, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen by including questions that are related to the story in a multiple choice format in order to evaluate the user's ability to recall a lesson learnt in the past when he/she analyzes the given alternatives as a hint to trigger his/her memory.

- Claims 17 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura 2002/0059031 in view of Wen 6,341,959 and further in view of Braunberger 2003/0077559.

Regarding claim 17, Shimura in view of Wen teaches the claimed limitations as discussed above.

Wen further teaches, the plural kinds of question units are associated with positions in the inspection sentences (col.4, lines 20-34), and the second examination chart forming section selects a question unit associated with a position in the range

detected by the dementia inspection client in the inspection sentence, thereby forming the second examination chart (col.4, lines 57-64).

Shimura in view of Wen does not explicitly teach, the dementia inspection client detects a range in the inspection sentences which the subject was able to read within a predetermined answer time limit.

However, Braunberger discloses a method and apparatus for periodically questioning that teaches, the dementia inspection client detects a range in the inspection sentences which the subject was able to read within a predetermined answer time limit (Para.0034, lines 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura view of Wen and further in view of Braunberger by configuring a Testing GUI in order to set a time limit that the user must read a given paragraph so that the paragraph would be removed from the screen as the set time expires and follow-up questions related to the paragraph would be presented to the user in order to evaluate the amount of information that the user is able to comprehend within a given amount of time.

Regarding claim 27, Shimura in view of Wen teaches the claimed limitations as discussed above.

Wen further teaches, a sentence range detecting section which detects a range in the inspection sentences which the subject was able to read within a predetermined answer time limit with respect to the first examination chart (col.4, lines 20-32).

Shimura in view of Wen does not explicitly teach, a sentence range detecting section which detects a range in the inspection sentences which the subject was able to read within a predetermined answer time limit.

However, Braunberger teaches, a sentence range detecting section which detects a range in the inspection sentences which the subject was able to read within a predetermined answer time limit (Para.0034, lines 1-12).

Therefore, as already indicated above, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura view of Wen and further in view of Braunberger by configuring a Testing GUI in order to set a time limit that the user must read a given paragraph so that the paragraph would be removed from the screen as the set time expires and follow-up questions related to the paragraph would be presented to the user in order to evaluate the amount of information that the user is able to comprehend within a given amount of time.

- Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura 2002/0059031 in view of Wen 6,341,959 and further in view of Polanyi 2003/0093275.

Regarding claim 18, Shimura in view of Wen teaches the claimed limitations as discussed above.

Shimura further discloses, color words in the character group of the inspection sentences are tinted with plural colors such that individual color word has characters of the same color (Para.0146).

Shimura in view of Wen does not explicitly teach, characters in the character group except the color words are tinted with a single color.

However Polanyi discloses systems and methods for dynamic reading instruction that teaches, characters in the character group except the color words are tinted with a single color (Para.0036).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen and further in view of Polanyi by displaying explanatory sentences on the screen and coinciding the font color of the given word with its meaning in order to allow the user to clearly memorize such words by recalling their color, so that the user would be able to remember the meanings of the words even after some extended period of time.

- Claims 23 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura 2002/0059031 in view of Wen 6,341,959 and further in view of McElwrath 2004/0009462.

Regarding claim 23, Shimura in view of Wen teaches the claimed limitations as discussed above.

Shimura in view of Wen teaches the claimed limitations except for the features being for a pre-test first examination chart and a pre-test second examination chart.

Shimura discloses the following features, the first examination chart includes sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color, requires a determination as to whether a color of the

characters constituting the color word is the same color as color represented by the color word (see FIG 5, FIG 7 and Para.0147), and requires an answer in a style capable of objectively determining whether the determination is correct or error (Para.0148), the chart sending section sends the first examination chart and the second examination chart to the dementia inspection client (Para. FIG 21, label 712).

Wen further discloses, the second examination chart has a combination of plural questions concerning contents of the sentences and plural answers which are prepared for each question and one of which is to be selected (col.4, lines 57-63).

Thus, as indicated above, Shimura in view of Wen teaches the above features except the features being for a pre-test first examination chart and a pre-test second examination chart.

However, McElwrath discloses a learning system that teaches pre-test module for generating different types pre-tests (Para.0467).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen and further in view of McElwrath by incorporating a pre-test module in order to generate pre-tests that have similar features as the actual tests so that the user would know the type of questions that he/she is expected to complete for the actual test, thereby mentally preparing the user.

Regarding claim 30, Shimura in view of Wen teaches the claimed limitations as discussed above.

Shimura in view of Wen teaches the claimed limitations except for the features being for a pre-test first examination chart and a pre-test second examination chart.

Shimura discloses the following features, the first examination chart includes sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color, requires a determination as to whether a color of the characters constituting the color word is the same color as color represented by the color word (FIG 5, FIG 7 and Para.0147), and requires an answer in a style capable of objectively determining whether the determination is correct or error (Para.0148), the dementia inspection client obtains through the answer obtaining section answers of the subject made within predetermined answer time limits to both the first examination and the second examination chart and sends the obtained answers to the dementia inspection server (Para.0178).

Wen further teaches, the second examination chart has a combination of plural questions concerning contents of the sentences and plural answers which are prepared for each question and one of which is to be selected (col.4, lines 57-63).

Shimura in view of Wen teaches the above features except the features being for a pre-test first examination chart and a pre-test second examination chart.

However, McElwrath discloses a learning system that teaches pre-test module for generating different types pre-tests (Para.0467).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of

Shimura and further in view of McElwrath by incorporating a pre-test module in order to generate pre-tests that have similar features as the actual tests so that the user would know the type of questions that he/she is expected to complete for the actual test, thereby mentally preparing the user.

Response to Arguments.

3. Applicant's arguments filed on 05/21/2009 have been fully considered but they are not persuasive. In the remarks,

(1) Applicant argues that with regard to claim 1, Wen teaches creating problems by providing a selection of words to fill in the blanks to provide sentences. Wen does not teach or suggest *providing a combination of plural questions concerning contents of the inspection sentences*. The subject matter of Wen is to challenge the learner to select a correct word from the presented selection of words, which selected words would thereby form a correct sentence. Additionally, the story of Wen is not specifically made up of color words, as claimed.

Shimura describes testing dementia with a chart including characters in color. The characters form words that represent the color of the characters . . . it is a list of colored color words (kanjis) as shown in Fig. 4 of Shimura that are shown to the subject in Shimura, not colored color words in inspection sentences, as claimed . . .

- In response to argument (1), the Examiner respectfully disagrees. Wen's system does teach or suggest the limitation regarding for example "*a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of each to be selected*" as recited in the

currently presented claims. For instance Wen discloses that the prior art system generates several sentences from a given paragraph and store them into a database (col.4, lines 20-32). The system also teaches that different styles of questions (test problem models) such as blank-filling, selection, sentence recombination, corrections, etc are designed (col.4, lines 37-49). It is very clear from the above teaching that the claimed feature "*a combination of plural questions concerning contents of the inspection sentences*" has already been suggested. For example, from the above teaching, one of ordinary skill in the art (at the time of the invention was made) would readily recognize that different styles of questions related to the sentences (e.g. **sentence recombination** type of questions and **bank-filling** type of questions) would be presented to the user. This clearly teaches or suggests the above claimed feature.

Note that, the reference described blank-filling type of question related to a given sentence as **an example**. However, such exemplary descriptions in the prior art should not be considered as restrictions of the prior art system (Applicant's argument appears to consider the example discussed in Wen's reference as a limitation of the prior art system).

Further, regarding the recited feature "*plural answers which are prepared for each question and one of each to be selected*", Wen's reference describes a blank-filling type of question that have several choice options from which the user is required to select one (col.4, lines 57-63). This section clearly teaches or suggests the fact that Wen's system does provide plural answers, which are prepared for each question, and one of each is to be selected; and therefore, meets the above claimed feature.

Applicant also argued that Shimura discloses list of colored color words that are shown to the subject, but not colored color words in inspection sentences. This argument appears to be a *piecemeal* analysis (attacking a single reference at a time without considering the combined teaching of the references), even though obviousness analysis under 35 U.S.C. 103(a) should be based on the combined teaching of the applied references that are pertinent to the given claim. In the instant case, Applicant's argument is directed only to Shimura's reference (referring to the colored words taught by Shimura as shown in FIG 4) while ignoring the teaching of the primary reference (Wen's teaching of the inspection sentences).

As clearly indicated in the previous office action (and also in this FINAL Office action), Wen already discloses presenting inspection sentences in which a character group constituting a story (col.4, lines 57-63), except for the words being colored (color words each representing color is tinted with plural colors such that individual color word has characters of the same color).

However, Shimura discloses a dementia test system that teaches or suggests the above missing feature (see Para.0146 and also FIG 4). Note that even if the teaching of Shimura is in terms of colors of characters, this does not mean that Shimura's teaching does not suggest colored words (it is well known in the art that it is the combination of characters that creates a word). For instance, some of the words depicted in FIG 4 of Shimura's reference are colored words in which the colors of the characters in one word are all the same (i.e. all of the characters that forms the given word has the same color; thereby making a single colored word). Thus, one of ordinary

skill in the art would readily recognize from Shimura's teaching that the prior art system is capable of forming a single colored word in which all of the characters forming the word have the same color; or a word in which the characters have different colors.

Therefore, it would have been readily obvious to one of ordinary skill in the art (at the time of the invention was made) to modify Wen's system in view of Shimura's teaching by incorporating characters that have different colors in the story in order to assess the subject's ability to identify or associate a given word with the color it represents.

Therefore, the Examiner concludes that Applicant's currently presented claimed features have already been taught or suggested by the prior art, as discussed above.

(2) Applicant argues that as described in paragraph 12 of the specification of the present application, inspection sentences make it possible to obtain evaluation with respect to the attention distributing ability required to pick up color words representing colors from the inspection sentences, and evaluation with respect to the attention distributing ability required to determine whether color represented by a color word and color of the color word match with each other or not (the effect of the first examination chart) . . .

Additionally, if Shimura is modified with Wen, the dementia testing system will be using sentences with removed words. This will render Shimura inoperable for the reading comprehension effects, since the context of the sentences would be eliminated...

- In response to argument (2), the Examiner respectfully disagrees. The first part

of this argument is directed to a subject matter that is discussed in the specification, but not in the claims. However, claims are given broadest reasonable interpretation without importing any limitations from the specification. For instance it has been held that claims are given their broadest reasonable interpretation in light of the supporting disclosure. In *re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir.1997).

Limitations appearing in the specification but **not recited** in the **claim** are **not read into the claim**. In *re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also In *re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

In addition, the above argument appears to be directed to the intended purpose of the claimed system. However, intended purpose of a given apparatus or system claim is not relied upon to patentably distinguish one invention from another; rather, it is the structural limitations of the claimed apparatus or system claim that patentably distinguishes one invention from another. That means, even if one assumes that the prior art system is implemented for a purpose different from Applicant's intended use, as long as the reference teaches or suggests the structural limitations of the system, it meets the claims.

Furthermore, the motivation to combine Wen in view of Shimura does not have to be explicitly suggested by any of the references. For instance, in order to establish a *prima facie* case of obviousness, according to MPEP, **706.02(j) [R-6] Contents of a 35 U.S.C. 103 Rejection**, 35 U.S.C. 103 authorizes a rejection where, to meet the claim, it

is necessary to modify a single reference or to combine it with one or more other references.

After indicating that the rejection is under 35 U.S.C. 103, the examiner should set forth in the Office action:

(A) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate,

(B) the difference or differences in the claim over the applied reference(s),

(C) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and

(D) an explanation >as to< why >the claimed invention would have been obvious to< one of ordinary skill in the art at the time the invention was made**.

** "To support the conclusion that the claimed invention is directed to obvious subject matter, **either** the **references** must expressly or impliedly suggest the claimed invention **or** the **examiner** must present a convincing line of **reasoning** as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). **

Therefore, the Examiner maintains that the **teaching or suggestion** for **combining references** should come **not only** from the **references applied**, but also **when it is obvious to one of ordinary skill in the art at the time of the claimed invention was made**.

Furthermore, modifying Wen's system in view of Shimura would make the modified system of Wen very successful because, the modified system evaluates not

only the user's ability to understand the content of the sentence and select a word that relates to the story, but also the user's ability to associate a given word with its color. That means, unlike the unmodified system, the modified system assesses the user's color recognition ability in addition to assessing the user's ability to choose the correct word. Therefore, such modification does not render Wen's system inoperative; rather, it would make it a more successful system for the reasons discussed above.

Similarly, modifying Shimura in view of Wen would make Shimura's invention more successful. For instance, after modification, the modified system of Shimura evaluates not only the user's ability to recognize relationships between words and their colors, but also to assess user's ability to choose a word that best satisfies a given sentence. Such modification would make the modified system a more comprehensive and successful system because, the modified system of Shimura is capable of assessing the user's ability to relate words with their colors, and also the user's ability to relate meaning of a word in a sentence.

Therefore, here also the Examiner concludes that Applicant's currently presented claimed features have already been taught or suggested by the prior art.

Conclusion

Applicant's amendment necessitated the new grounds of rejection presented in this final office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruk A. Gebremichael whose telephone number is (571)270-3079. The examiner can normally be reached on Monday to Friday (7:30AM-5:00PM) ALT. Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI XUAN can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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